

Current ENERGY STAR Qualified Homes Policy Record

How to Use This Document

EPA regularly receives partner questions and comments regarding various aspects of the program documents. This document is a record of the issues that have been received since the release of the last revision to the program documents. These issues are either pending resolution by EPA or have been resolved, sometimes resulting in modifications that will be incorporated into the next revision of the program documents. The primary purpose of this document is to allow all partners to have equal access to the latest policy issues and resolutions.

For Version 2.5 and Version 3, EPA intends to formally incorporate policy modifications into the next revision of the program documents. Those edits will then be enforced for homes permitted after a specified transition period, typically 60 days from the release of the revised guidelines. Partners may, at their discretion, use the determinations in this document immediately, in advance of the formal implementation dates. If they do so, they should be sure to document the permit dates of the affected homes and to include a copy of the policy record in the files retained by the Home Energy Rater. Should the need arise, this will allow partners to demonstrate that they acted with the best information available.

Definitions

Each issue listed here is classified as a Change, Clarification, Refinement, Comment, or as an Issue Under Review. These are defined as follows:

- *Change* – The addition, deletion, or modification of a program requirement. A change will typically result from a partner question or feedback indicating that EPA's original intent is not being met or from changes in relevant standards (e.g., ENERGY STAR labeled product requirements, NAECA standards, IECC codes). A change is the most significant type of edit for partners because it is likely to change the way that partners comply with the program.
- *Clarification* – The clarification of a program requirement, typically resulting from a partner question indicating confusion or ambiguity. Clarifications are not intended to significantly change the scope of the program guidelines, but rather to clarify the original intent of the requirement. A clarification is secondary in importance to a change; it should not significantly alter the way that most partners comply with the program.
- *Refinement* – A minor revision, such as an improved choice of words, a grammatical correction, or a correction to a typographical error. A refinement is the least important type of edit; it should have no impact on the way that partners comply with the program.
- *Comment* – A comment provided by EPA in response to a question, which results in no change to the program documents. This may occur, for example, if the question can be answered by referring to already established policy. Aside from the partner asking the question, such comments will typically have no impact on the way that partners comply with the program.
- *Issue Under Review* – An issue that has been submitted and that EPA is still evaluating. Once EPA has evaluated the issue, it will offer a resolution and reclassify the issue using one of the four categories above.

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ID	Log Date	Program Document	Classification	Topic
00008	07/25/2011	National Program Requirements (Version 3, Rev. 04)	Issue Under Review	Performance Path – Modeling requirements for multifamily buildings
				Issue: Partners have asked if each unit in a multifamily building must be modeled, or if either the entire building as a whole or some subset of units can be modeled under the Performance Path. Partners have also asked what HERS Index should be assigned to units that are not modeled, if it is acceptable to not model each unit.
				Resolution: [Issue under review.]
00017	07/25/2011	Thermal Enclosure System Rater Checklist (Version 3, Rev. 04)	Issue Under Review	Use of infrared thermography
				Issue: Partners have asked if infrared thermography can be used to complete the Thermal Enclosure System Rater Checklist.
				Resolution: [Issue under review.]
00111	01/15/2012	Thermal Enclosure System Rater Checklist (Version 3, Rev. 04)	Issue Under Review	Item 2.2 & Item 4.4.1 – Reflective insulation
				Issue: Partners have asked for permission to use radiant barrier house wrap as reflective insulation for the purpose of fulfilling Items 2.2 and 4.4.1. Policy Record Item 00024 did not allow this practice because the R-values for reflective insulation products rely on air spaces that are not integral to the products and because the ICC Evaluation Service typically classifies such products as weather barriers rather than as insulation products. In response to this guidance, partners have asked EPA to reevaluate the acceptability of reflective insulation products on the grounds that they reduce heat transfer when installed properly, they are treated as insulation products under the Federal Trade Commission 16 CFR Part 460 – Labeling and Advertising of Home Insulation, and there are applicable standards that govern their specification and installation (ASTM C727 and ASTM C1224).
				Resolution: [Issue under review.]
00112	01/15/2012	Thermal Enclosure System Rater Checklist (Version 3, Rev. 04)	Issue Under Review	Section 3 – Exterior air barriers on attic kneewalls
				Issue: Partners have asked if an exterior air barrier must be installed on attic kneewalls if the ceiling insulation depth is higher than the kneewall.
				Resolution: [Issue under review.]
0XXXX	4/20/2012	Thermal Enclosure System Rater Checklist (Version 3, Rev. 05)	Change	Item 4.4.5e – Minimum stud spacing for advanced framing
				Issue: Item 4.4.5e requires 24” on-center stud spacing in Climate Zones 5 - 8 for partners using the advanced framing strategy to reduce thermal bridging in 2x6 wood frame walls. An exemption from the 24” on-center spacing requirement is provided in Footnote 21 if alternate spacing is serving a structural purpose and a framing plan is provided by the builder, architect,

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				<p>designer, or engineer. Per Footnote 21, the Rater need not evaluate the structural necessity of the details in the framing plan to qualify the home.</p> <p>ENERGY STAR partners have responded to these requirements and allowances in several ways:</p> <ul style="list-style-type: none"> • Some partners have implemented this requirement and have produced efficient wall assemblies with reduced thermal bridging as was originally intended. • Some partners have circumvented this requirement using the exemption. Partners have suggested that the exemption has been used for a variety of reasons, ranging from the intended (e.g., for structural reasons) to the unintended (e.g., to avoid the cost of redesigning framing plans or due to perceived quality concerns about 24" on-center spacing). • Some partners have circumvented this requirement by using 2x4 studs, which results in the installation of less wall cavity insulation and more thermal bridging than originally intended. • Some partners have made plans to leave the program altogether to avoid this detail. <p>In summary, the current policy is being unevenly enforced. Those that are complying with the requirement are reducing thermal bridging as intended, while those not complying with the requirement are not reducing thermal bridging.</p>
				<p>Resolution: In order to improve the frequency with which Item 4.4.5e reduces thermal bridging, EPA will remove the exemption from 24" on-center spacing and instead replace it with an alternate compliance path that requires at least R-20.0 wall insulation.</p> <p>That is to say, to meet the intent of Item 4.4.5e, partners in Climate Zones 5 - 8 may either use 24" on-center spacing <u>or</u> insulate the wall to \geq R-20.0 or higher. Partners will no longer be exempted from the 24" on-center spacing requirement simply by providing a framing plan by the builder, architect, designer, or engineer.</p> <p>Partners that elect to use 24" on-center spacing to satisfy Item 4.4.5e will reduce thermal bridging by reducing the quantity of studs in the wall. Those who elect to use R-20.0 insulation will instead improve the overall wall assembly using advanced insulation materials (e.g., high-density fiberglass batts, blown-in fiberglass, dense-packed cellulose, foam).</p> <p>To account for these policy changes, Item 4.4.5e will be revised to read:</p> <p style="padding-left: 40px;">"Minimum stud spacing of 16 in. o.c. for 2x4 framing in all Climate Zones and, in Climate Zones 5 through 8, 24 in. o.c. for 2x6 framing²¹"</p> <p>Footnote 21 will be revised to read:</p>

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				<p>"In Climate Zones 5 - 8, a minimum stud spacing of 16 in. o.c. is permitted to be used with 2x6 framing if \geq R-20.0 wall insulation is installed. Regardless, all vertical framing members shall either be on-center or have an alternative structural purpose (e.g., framing members at the edge of pre-fabricated panels) that is apparent to the Rater or documented in a framing plan that encompasses that member and is provided by the builder, architect, designer, or engineer. The Rater need not evaluate the structural necessity of the framing plan to qualify the home. However, all 2x6 framing with stud spacing of 16 in. o.c. in Climate Zones 5 - 8 shall have \geq R-20.0 wall insulation installed regardless of any framing plan or alternative equivalent total UA calculation."</p>
00186	04/20/2012	HVAC System Quality Installation Rater Checklist (Version 3, Rev. 05)	Change	<p>Item 8.1 - Local mechanical exhaust in kitchens</p> <p>Issue: Item 8.1 requires, in part, that in each kitchen a system shall be installed that exhausts directly to the outdoors and that the airflow be verified by the Rater.</p> <p>Partners have encountered unexpected challenges implementing this requirement. Namely, among standalone fans that are not integrated with the range, few models exist that are rated for kitchen use (i.e., to handle grease). Those that are rated for kitchen use do not fit in conventionally framed floors. Fans not rated for kitchen use are not permitted to be installed near the range, creating layout constraints.</p> <p>Resolution: The requirement in the Checklist to install a kitchen exhaust fan is derived from ASHRAE 62.2-2010, and EPA does not intend to deviate from this standard. However, because it is impractical for many partners to implement at this time, enforcement of Item 8.1 has been delayed until further notice. This delay is effective while EPA works with manufacturers to assess the potential availability of over-the-range microwave products and standalone products that would meet this requirement.</p> <p>Once EPA determines how this requirement can be successfully implemented – either through the availability of new products or through changes in kitchen ventilation strategies – EPA will provide a phase-in period that will enable partners to successfully implement the policy as fast as is practical.</p>
00187	04/20/2012	HVAC System Quality Installation Rater Checklist (Version 3, Rev. 05)	Change	<p>Item 9.1 - Sone requirements for an intermittent kitchen exhaust fan with integrated microwave</p> <p>Issue: Item 9.1 requires, in part, that an intermittent kitchen exhaust fan be rated at \leq 3 sones by the manufacturer when producing no less than the minimum airflow required by Section 8. Fans that are rated at \geq 400 CFM are exempt from this requirement.</p> <p>Partners using over-the-range kitchen exhaust fan units that are integrated with microwaves are unable to find products that carry sone ratings. It is unclear whether more time is needed to simply test such products for sound levels or if the small size of these units will make it inherently difficult to meet the sound limits.</p>

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				<p>Resolution: The sound and airflow limits defined in the Checklist are derived from ASHRAE 62.2-2010 and EPA does not intend to deviate from this standard. However, because it is impractical for many partners to implement at this time, enforcement of Item 9.1 for kitchen exhaust fans is delayed until further notice. This delay is effective while EPA works with manufacturers to assess the potential availability of over-the-range microwave products that would meet this requirement.</p> <p>Once EPA determines how this requirement can be successfully implemented – either through the availability of new products or through changes in kitchen ventilation strategies – EPA will provide a phase-in period that will enable partners to successfully implement the policy as fast as is practical.</p>
00149	01/15/2012	HVAC System Quality Installation Rater Checklist (Version 3, Rev. 04)	Issue Under Review	Section 11 – Filtration for mechanical ventilation
				Issue: Partners have asked if Section 11, related to filtration, applies to mechanical ventilation systems.
				Resolution: [Issue under review.]
00078	07/25/2011	Water Management System Builder Checklist (Version 3, Rev. 04)	Issue Under Review	Item 3.2 – Gutters and downspouts
				Issue: Partners have requested that EPA allow alternatives to gutters and downspouts where a complete drainage system consistent with the International Residential Code (e.g., sloped sod with sand and swales) has been provided.
				Resolution: [Issue under review]